



DRILL STEM TEST REPORT

Prepared For: **F.G Holl Company**

9431 East Central Suit 100
Wichita Kansas 6205

ATTN: Rene Husted

Mull unit #B 1-14

14-20s-15w-Barton

Start Date: 2012.08.14 @ 12:13:00

End Date: 2012.08.14 @ 19:20:30

Job Ticket #: 17729 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.08.15 @ 04:09:01

F.G Holl Company
14-20s-15w-Barton
Mull unit #B 1-14
DST # 1
Arbuckle
2012.08.14



DRILL STEM TEST REPORT

F.G Holl Company
 9431 East Central Suit 100
 Wichita Kansas 6205
 ATTN: Rene Husted

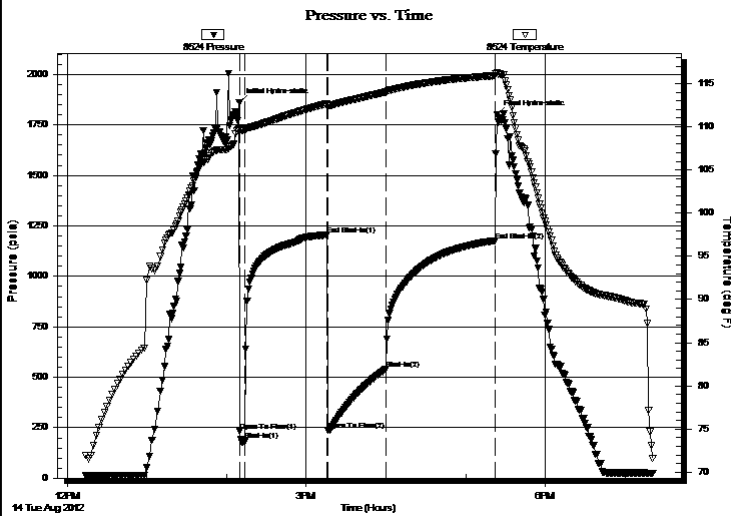
14-20s-15w-Barton
Mull unit #B 1-14
 Job Ticket: 17729 **DST#: 1**
 Test Start: 2012.08.14 @ 12:13:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 14:10:00 Tester: Dustin Ellis
 Time Test Ended: 19:20:30 Unit No: 3315-Great Bend-45
 Interval: **3675.00 ft (KB) To 3690.00 ft (KB) (TVD)** Reference Elevations: 2002.00 ft (KB)
 Total Depth: 3690.00 ft (KB) (TVD) 1994.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8524 Inside
 Press @ RunDepth: 540.81 psia @ 3686.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.08.14 End Date: 2012.08.14 Last Calib.: 2012.08.14
 Start Time: 12:14:00 End Time: 19:20:30 Time On Btm: 2012.08.14 @ 14:09:30
 Time Off Btm: 2012.08.14 @ 17:23:30

TEST COMMENT: 1st Open 5 minutes Strong blow bottom bucket 1 minute.
 1st Shut in 60 minutes Yes blow back
 2nd Open 45 minutes Strong blow bottom bucket 1 minute.
 2nd Shut in 90 minutes Yes blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1861.60	109.78	Initial Hydro-static
1	231.08	109.89	Open To Flow (1)
5	185.81	109.61	Shut-In(1)
66	1204.88	112.66	End Shut-In(1)
67	237.65	112.39	Open To Flow (2)
111	540.81	114.01	Shut-In(2)
193	1176.45	115.92	End Shut-In(2)
194	1802.51	116.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas to surface in 18 minutes.	0.00
183.00	Oil cut mud 5% Gas 5% Oil 90% Mud	2.57
183.00	Oil pluse gas cut muddy w water	2.57
0.00	Gas 5% Oil 30% Mud 60% Water 5%	0.00
854.00	Water 100%	11.98
0.00	2470 Gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



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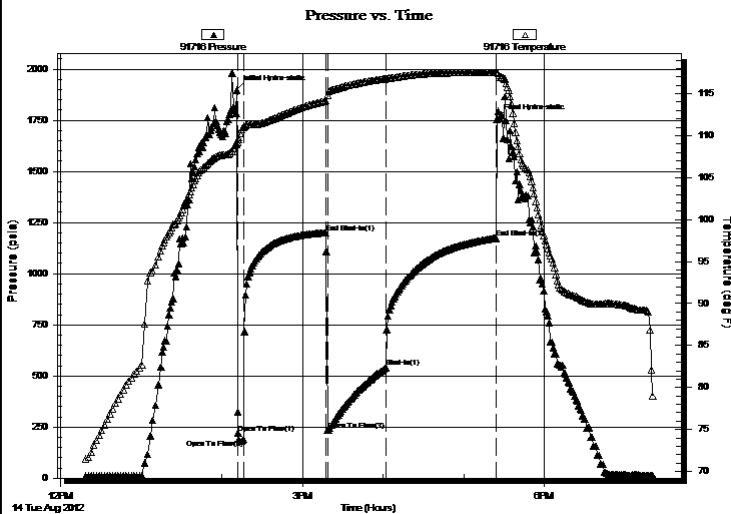
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 Total Depth: 3690.00 ft (KB) (TVD) 1994.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 91716 Outside

Press @ Run Depth: 1173.44 psia @ 3687.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.08.14 End Date: 2012.08.14 Last Calib.: 2012.08.15
 Start Time: 12:14:00 End Time: 19:21:00 Time On Btm: 2012.08.14 @ 14:11:00
 Time Off Btm: 2012.08.14 @ 17:24:30

TEST COMMENT: 1st Open 5 minutes Strong blow bottom bucket 1 minute.
 1st Shut in 60 minutes Yes blow back
 2nd Open 45 minutes Strong blow bottom bucket 1 minute.
 2nd Shut in 90 minutes Yes blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1898.54	109.07	Initial Hydro-static
1	218.39	109.49	Open To Flow (1)
5	190.21	111.03	Open To Flow (2)
66	1200.21	114.15	End Shut-In (1)
68	232.97	114.83	Open To Flow (3)
111	542.47	116.77	Shut-In (1)
193	1173.44	117.53	End Shut-In (2)
194	1755.78	117.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas to surface in 18 minutes.	0.00
183.00	Oil cut mud 5% Gas 5% Oil 90% Mud	2.57
183.00	Oil pluse gas cut muddy w ater	2.57
0.00	Gas 5% Oil 30% Mud 60% Water 5%	0.00
854.00	Water 100%	11.98
0.00	2470 Gas in pipe	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company

14-20s-15w-Barton

9431 East Central Suit 100
Wichita Kansas 6205

Mull unit #B 1-14

Job Ticket: 17729

DST#: 1

ATTN: Rene Hustedad

Test Start: 2012.08.14 @ 12:13:00

Tool Information

Drill Pipe:	Length: 3668.00 ft	Diameter: 3.80 inches	Volume: 51.45 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 51.45 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3675.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3652.00	
Hydraulic Tool	5.00			3657.00	
Jars	6.00			3663.00	
Safety Joint	2.00			3665.00	
Packer	5.00			3670.00	28.00 Bottom Of Top Packer
Packer	5.00			3675.00	
Perforations	10.00			3685.00	
Recorder	1.00	8524	Inside	3686.00	
Recorder	1.00	91716	Outside	3687.00	
Bull Plug	3.00			3690.00	15.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



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FLUID SUMMARY

F.G Holl Company

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9431 East Central Suit 100
Wichita Kansas 6205

Mull unit #B 1-14

Job Ticket: 17729

DST#: 1

ATTN: Rene Husted

Test Start: 2012.08.14 @ 12:13:00

Mud and Cushion Information

Mud Type: KCl	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: 0.20 ohm.m	Gas Cushion Pressure: psia		
Salinity: 6300.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas to surface in 18 minutes.	0.000
183.00	Oil cut mud 5%Gas5%Oil90%Mud	2.567
183.00	Oil pluse gas cut muddy w ater	2.567
0.00	Gas 5% Oil 30% Mud 60% Water5%	0.000
854.00	Water 100%	11.979
0.00	2470 Gas in pipe	0.000
0.00	Chlorides 44,000 @ 59 degrees	0.000

Total Length: 1220.00 ft Total Volume: 17.113 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

F.G Holl Company

14-20s-15w-Barton

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Wichita Kansas 6205

Mull unit #B 1-14

Job Ticket: 17729

DST#: 1

ATTN: Rene Husted

Test Start: 2012.08.14 @ 12:13:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
		0.00	0.00	0.00

